CLAIMS

What is claimed is:

1. A method for accessing a compressed image comprising a boot environment and a software image stored on a computer-readable medium, said boot environment and software image comprising a plurality of files combined to reduce file redundancy, said method comprising executing a driver component to perform:

identifying the boot environment in the compressed image;

loading the compressed image as a file system; and

booting from the identified boot environment via the file system.

2. The method of claim 1, further comprising performing one or more of the following: installing a software image on a computer, system preparation, and system maintenance.

3. The method of claim 1, further comprising initializing the identified boot environment.

4. The method of claim 1, further comprising:

seeking the compressed image on the computer-readable medium; and

initializing the compressed image.

5. The method of claim 1, wherein executing comprises executing the driver component in the context of a running operating system.

6. The method of claim 1, further comprising searching for the compressed image and opening the compressed image.

7. The method of claim 1, wherein the driver component is embodied in one or more of the following: software, firmware, and hardware.

8. The method of claim 1, wherein the compressed image includes a header and wherein identifying comprises searching the header for a boot specifier indicating the location of the boot environment on the computer-readable medium.

9. The method of claim 1, wherein the software image comprises an operating system.

10. The method of claim 1, wherein the boot environment comprises a minimal operating system.

11. The method of claim 1, wherein the compressed image comprises a plurality of files, and wherein booting from the identified boot environment comprises:

uncompressing at least one of the files associated with the identified boot environment; and

booting from the identified boot environment via the uncompressed files without storing the uncompressed files in memory.

12. One or more computer-readable media having computer executable instructions for performing the method of claim 1.

13. A method for accessing a compressed image stored on a computer-readable medium, said compressed image storing descriptive data and file data, said method comprising executing a driver component to perform:

identifying a boot environment in the compressed image via the descriptive data;

loading the compressed image as a file system to provide access to the file data; and

booting from the identified boot environment via the file system.

14. The method of claim 13, further comprising performing one or more of the following: installing a software image on a computer, system preparation, and system maintenance.

15. The method of claim 13, wherein the descriptive data comprises metadata including one or more of the following: a file name, an attribute, a file update time, a compression format, a file location and a stream.

16. The method of claim 13, wherein the file data comprises binary file data.

17. The method of claim 13, further comprising initializing the identified boot environment.

18. The method of claim 13, further comprising:
seeking the compressed image on the computer-readable medium; and
initializing the compressed image.

19. The method of claim 13, wherein executing comprises executing the driver component in the context of a running operating system.

20. The method of claim 13, further comprising searching for the compressed image and opening the compressed image.

21. The method of claim 13, wherein the driver component is embodied in one or more of the following: software, firmware, and hardware.

22. The method of claim 13, wherein the compressed image includes a header and wherein identifying comprises searching the header for a boot specifier indicating the location of the boot environment on the computer-readable medium.

23. The method of claim 13, wherein the software image comprises an operating system.

24. The method of claim 13, wherein the boot environment comprises a minimal operating system.

25. The method of claim 13, wherein the compressed image comprises a plurality of files, and wherein booting from the identified boot environment comprises:

uncompressing at least one of the files associated with the identified boot environment; and

booting from the identified boot environment via the uncompressed files without storing the uncompressed files in memory.

26. One or more computer-readable media having computer executable instructions for performing the method of claim 13.

27. One or more computer-readable media having one or more computer-executable components for accessing a compressed image comprising a boot environment and a software image, said boot environment and software image comprising a plurality of files combined to reduce file redundancy, said components comprising a driver component for:

identifying the boot environment in the compressed image;

loading the compressed image as a file system; and

booting from the identified boot environment via the file system.

28. The computer-readable media of claim 27, wherein the driver component further performs one or more of the following: installing a software image on a computer, system preparation, and system maintenance.

29. The computer-readable media of claim 27, wherein the driver component is loaded by a boot-time driver.

30. The computer-readable media of claim 27, wherein the driver component is loaded on top of a file system stack in the boot environment.

31. The computer-readable media of claim 27, wherein the driver component executes in the context of a running operating system.

32. The computer-readable media of claim 27, wherein the driver component is embodied in one or more of the following: software, firmware, and hardware.

33. The computer-readable media of claim 27, wherein the compressed image includes a header and wherein identifying comprises searching the header for a boot specifier indicating the location of the boot environment on the computer-readable media.

34. The computer-readable media of claim 27, wherein the compressed image stores descriptive data and file data.

35. The computer-readable media of claim 34, wherein the descriptive data comprises metadata including one or more of the following: a file name, an attribute, a file update time, a compression format, a file location and a stream.

36. The computer-readable media of claim 34, wherein the file data comprises at least one of binary file data and textual file data.

37. A computer-readable medium having stored thereon a data structure representing a compressed image, said data structure comprising:

a boot environment; and

a software image, wherein said boot environment and said software image comprise a plurality of files combined to reduce file redundancy.

38. The computer-readable medium of claim 37, further comprising a driver component intercepting communications between the boot environment and the software image to boot the software image.

39. The computer-readable medium of claim 38, wherein the driver component loads the data structure as a file system.

40. The computer-readable medium of claim 39, wherein the boot environment comprises a minimal operating system.

41. The computer-readable medium of claim 37, wherein the boot environment and software image are stored in the data structure as one or more compressed segments.

42. The computer-readable medium of claim 41, further comprising an offset table including a plurality of entries, each of said entries identifying a location of one or more of the segments.

43. The computer-readable medium of claim 41, wherein each of the segments comprises thirty-two kilobytes.

44. The computer-readable medium of claim 37, wherein the boot environment and the software image are compressed separately in the data structure.

45. The computer-readable medium of claim 37, further comprising descriptive data for the boot environment and software image including one or more of the following: a file name, an attribute, a file update time, a compression format, a file location and a stream.

46. A system for booting from a compressed image comprising a boot environment and a software image stored on a computer-readable medium, said boot environment and software image comprising a plurality of files combined to reduce file redundancy, said system comprising:

means for identifying the boot environment in the compressed image;

means for loading the compressed image as a file system; and

means for booting from the identified boot environment via the file system.

47. The system of claim 46, wherein the system executes in the context of a running operating system.

48. The system of claim 46, further comprising descriptive data for the boot environment and software image including one or more of the following: a file name, an attribute, a file update time, a compression format, a file location and a stream.

49. The system of claim 46, further comprising means for performing one or more of the following: installing a software image on a computer, system preparation, and system maintenance.